

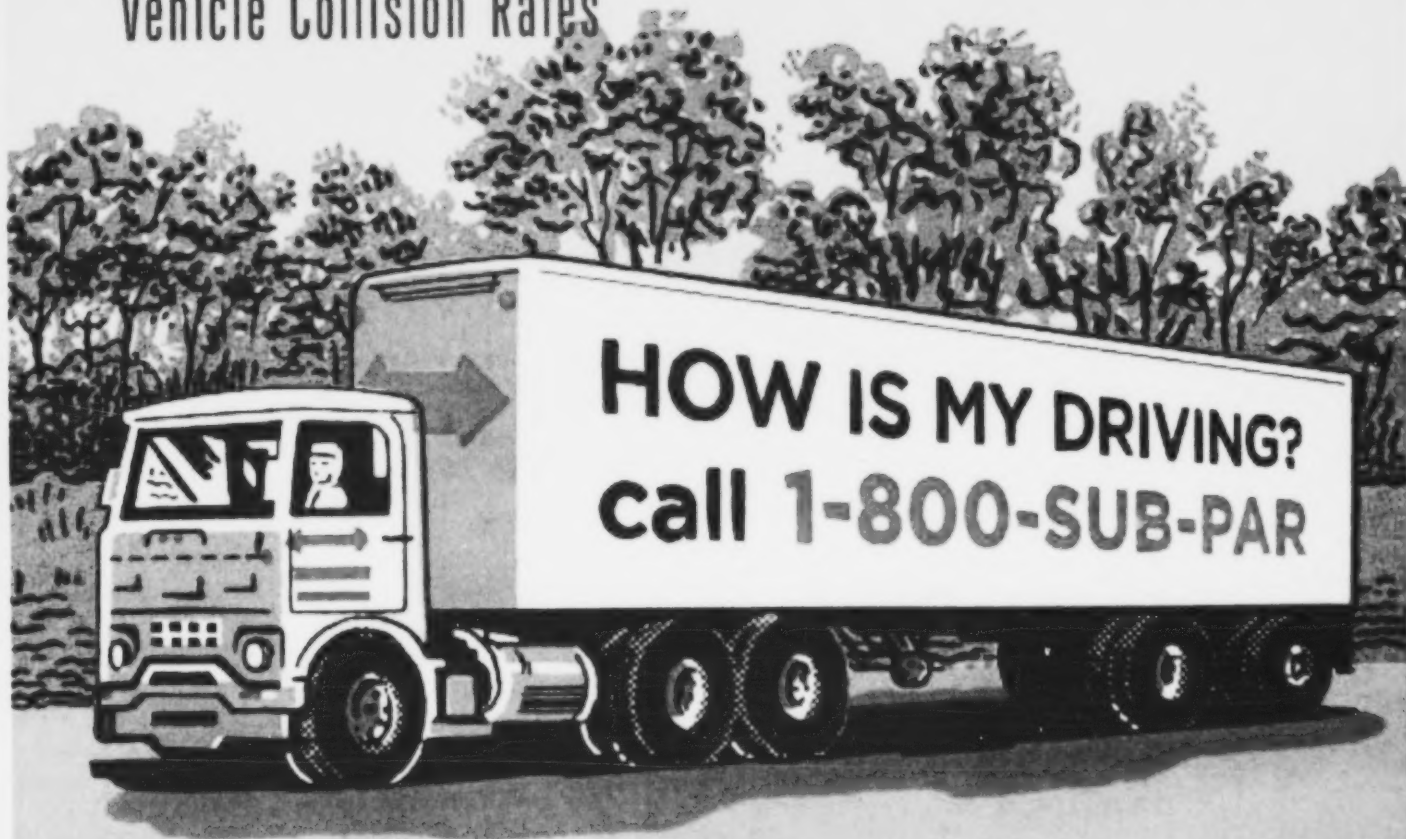
OCCUPATIONAL

Health & Safety

MAGAZINE

TACKLING ALBERTA'S HIGH

Vehicle Collision Rates



LET'S GET CELL PHONE USERS Off the Road!

by Jason Winsor



After all the studies and ever-growing statistics, you would think our governments would ban the use of cell phones while driving. According to Transport Canada's Web site, 68 per cent of Canadians support such a ban, yet Newfoundland is the only jurisdiction in Canada that has taken any action to date. A driver who uses a cell phone while driving on "Da Rock" can be charged with dangerous driving or even criminal negligence. We should tip our hats to this province for making that decision and providing safer roads for all that travel them.

Don't get me wrong, I'm not bad-mouthing cell phones. I would be lost without mine, and I think it is a great tool for dealing with safety issues such as reporting a collision. But what are the rest of us waiting for? More research into what we already know? Cell phone usage while driving is very dangerous, and it should be stopped.

As I cycle to and from my office in downtown Calgary, I find myself growing more nervous each day about sharing the roads with the drivers who need to make or take that phone call while driving alongside me. During one week last spring, I was cut off four times by drivers who were talking on their cell phones. Even worse, they didn't stop to see if everything was okay.

Studies have shown that drivers who use cell phones while driving spend more time looking centrally and less time using their peripheral vision. Perhaps that is why they didn't see me.

I take the city bus when the weather is poor. On one cold and wet day the bus driver proceeded to pick up his cell phone, make a call and drive that big bus, all at the same time. How dangerous is that? The driver was using one hand to steer, chatting up a storm and stopping to pick up people. He was taking all of our lives in his hands to chat with a friend about what he did on the weekend. I stood up to tell him he should not be on the phone while driving

but as I was walking towards him he said goodbye to his phone buddy and got back to concentrating on the main task at hand.

If government cannot act for whatever reason, we as members of society must make a conscious effort to move forward without the help of enforcement. I love this province, which has been my home since 1996, and I have decided that I want to make it a safer place for all who reside here.

I happen to work in the safety field. So perhaps I have more opportunities than others to influence safety policies and standards in my company and to encourage my co-workers to take these policies and standards seriously. But companies don't need to wait for the decision-makers of Canada to pass a law. Companies can establish a policy stating that there is to be no answering or initiating of phone calls while driving. And they can ensure that it is strictly followed. Penalties for violating the policy can be stiff - up to and including termination from the job. Such policies can change the behaviour of employees, both on the job and in their personal lives.

An individual can do a lot as well. Start with you and your family - your kids. Children will follow in your

footsteps. My daughter is too young to understand laws, but she does understand what's safe. As soon as we get in our car she says, "Everyone put on your seatbelts." I will also make sure she grows up knowing that cell phone usage while driving is unsafe.

As noted on the Transport Canada Web site, "Always remember, you'll survive a missed phone call, but you might not survive a collision."

Jason Winsor is the OFS Transportation Manager of Canada at Schlumberger Canada Ltd.

"Always remember, you'll survive a missed phone call, but you might not survive a collision."

Transport Canada

OCCUPATIONAL
Health & Safety
MAGAZINE

An Alberta Human Resources and Employment publication

Managing Editor - Wally Boer
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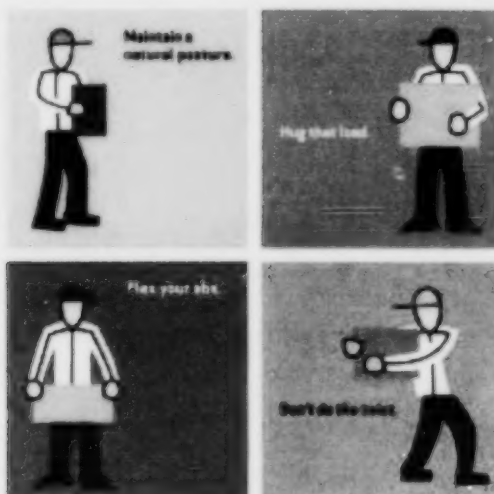
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Alberta Chiropractors Educate Workers about Back Health

All workers place many stressful demands on their bodies each day. Since workers are all "occupational athletes," they need to become more aware of their bodies and how the body functions.

The College of Chiropractors of Alberta is providing some assistance in this area through their Back Health in the Workplace initiative. Launched in conjunction with NAOSH Week in May 2004, the program seeks to educate working Albertans about back health and injury prevention. Educational materials, available at www.albertachiro.com, include tips on lifting, posture and sitting, bending and crouching, stretching, and strengthening, as well as an individual risk assessment tool.

The Back Health in the Workplace program is designed to support the government's Work Safe Alberta initiative. "This is an opportunity to partner with government and industry in delivering workplace health and safety messages," says Dr. Les Shaw, President of the College of Chiropractors of Alberta. "We believe chiropractic plays a major role in the prevention and treatment of back pain and back-related injuries."

For many years Alberta chiropractors have also worked successfully with the Workers' Compensation Board-Alberta to provide chiropractic treatment to injured workers within a specific model of care. "Authorized chiropractors have made significant contributions to the improved management of injured workers and represent a valued part of our health care provider network," says Dr. Sally Nikolaj, General Manager of Millard Health, an organization responsible for managing a large network of providers who deliver health care services to injured workers.

For more information about back health and chiropractic care in Alberta, visit www.albertachiro.com.

Health & Safety
Conference Society of Alberta

3rd ANNUAL

Alberta Health & Safety Conference and Trade Fair



November 8-10, 2004

Shaw Conference Centre, Edmonton

Special Guest Speaker: James "Skipper" Kendrick,
President of the American Society of Safety Engineers

The Health & Safety Conference Society of Alberta is a not-for-profit multi-partner organization that includes industry safety associations, professional organizations, government, Workers' Compensation Board-Alberta and other related groups.

For more information, call Ed Corson, (403) 275-7785, or Dianne Paulson, (780) 453-3311. Or visit the Society's Web site at www.hsconference.com.



2003 Best Safety Performers

Work Safe Alberta has awarded Best Safety Performer designation to 350 Alberta employers from across the province. Each of these companies and agencies had an excellent health and safety record during 2003. For a complete list of the Best Safety Performers, along with information about how to qualify for this annual award, visit www.worksafely.org, and click on Workplace Health and Safety.



Construction Owners Association of Alberta Best Practice Awards, 2004

Congratulations to the recipients of the COAA Best Practices Awards, 2004.

The Colt Companies received the Safety Implementation and Performance Improvement Award (Large Organization) for implementing and improving on seven COAA Safety Best Practices and for significant improvement in safety performance.

Aron Services (2003) Ltd. received the Safety Implementation and Performance Improvement Award (Small Organization) for improving its safety management, for implementing the Owners Guide to Contractor Health and Safety, and for its Bulletin Board Service and safety perception surveys.

PCL Industrial Constructors Inc. received the Safety Leadership and Innovation Award for active participation in the development and ongoing implementation of several COAA Safety Best Practices, including a three-tiered hazard identification process, a fabrication training facility, and near-miss reporting and analysis.

Merit Contractors Association received the Workforce Development Leadership Award for its work with supervisor and skills development training, leadership in pre-apprenticeship training and involvement, and contribution to several COAA workforce development committees.

For more information contact Brad Anderson, Executive Director, Construction Owners Association of Alberta, phone (780) 420-1145, info@coaa.ab.ca

Workplace Injury Rates Reduced to Record Low

In 2003, Alberta workplaces had their best safety performance in over a decade. The annual injury rate of 2.8 serious injuries per 100 full-time jobs was the lowest since 1991, which is as far back as the current system of lost time claim rates records.

However, there were still 127 work-related deaths and over 39,000 serious injuries in Alberta in 2003. "Every one of these incidents could have been prevented if workers and employers had made the right choices," says Alberta Human Resources and Employment Minister Clint Dunford.

Aging Workforce Presents Health and Safety Challenges

- In 2004, 8.4 per cent of Canadians over 65 were working – up from 7.8 per cent five years earlier.
- An estimated 305,000 Canadians aged 65 and over were employed in 2001, up from about 255,000 in 1996. This represents a 20 per cent increase, even though the total senior population grew by only 11 per cent during the same period.

Source: Statistics Canada, *Perspectives on Labour and Income*, Vol. 5 No. 2, February 2004.

The current "greying" of the Canadian workplace means paying more attention to workers' health, according to the 2003 annual report of the Institute for Work & Health, a not-for-profit research organization based in Toronto. "Age-related declines in sensory function, physical strength and functional ability will need to be accommodated on the job," the report states. "The performance demands of different occupations will also need to be assessed relative to the capacities of older workers." For example, to retain older workers who have chronic conditions such as arthritis, employers may need to make ergonomic changes and offer greater job flexibility.

For more information, visit the Institute for Work & Health website at www.iwh.on.ca

PUSH IT or PULL IT?

by Ray Cislo

Carts and wheeled equipment help to make work safer and more efficient in almost every workplace. For example, dollies move heavy equipment parts on shop floors, and wheeled carts carry supplies and materials in office buildings. It's important, though, to understand how best to work with wheeled equipment since between 9 and 20 per cent of the injury claims for low back pain are the result of pushing and pulling activities.

Push rather than pull

Whenever possible, push a load instead of pulling it (Figure 1).

- The cart can run over your feet or strike your ankles when you are pulling it.
- If you pull a load while facing the direction of travel, your arm is stretched behind your body, placing your shoulder and back in an awkward position that increases the likelihood of injury.
- If you pull a load while walking backwards, you can't see where you're going.
- Most of us can develop higher push forces by leaning our body weight into the load.



Figure 1

Handle height

Each of us has a preferred height at which pushing or pulling is most efficient. Unfortunately, few carts are equipped with height-adjustable handles. For pushing, the handle should be between your elbow and hip. For pulling, the handle should be between your hip and knee. If pushing will not cause the load to shift or slide off the cart or dolly, you can push on the load instead of the handle, for example, a refrigerator on a wheeled dolly. Pulling a load almost always requires a handle.

You can also use carts and equipment with continuous vertical handles (Figure 2) that allow you to place your hands at an appropriate height. To accommodate workers of various heights, vertical handles for pushing should cover a range of approximately 76 cm to 120 cm above the rolling surface (66 cm to 100 cm for pulling).



Figure 2

Maintenance

Properly selected and well-maintained wheels and swivel casters can make an important difference. Think how a jammed or locked swivel caster on a shopping cart makes it more difficult to change directions and often requires you to exert significant force in an awkward body position. What if the load weighed 200 kg rather than the 20 or 30 kg you are likely to have in your shopping cart?

Other suggestions:

- Use high-quality wheels or casters that are appropriate for the rolling surface.
- In general, choose larger diameter wheels, which roll better, particularly over rough surfaces and over narrow gaps such as the spaces in front of elevators.
- Minimize the distance that loads need to be pushed or pulled.
- Reduce the weight or size of loads.

For more details, see Safety Bulletin "Push It or Pull It,"

www.whs.gov.ab.ca/publications/pdf/erg033.pdf.

Ray Cislo, P.Eng., B.Sc.(H.K.) is a safety engineering specialist at Workplace Policy and Standards, Alberta Human Resources and Employment.

www.darcor.com/pdf/Darcor_Whitepaper.pdf

The Ergonomics of Manual Material Handling — Pushing and Pulling Tasks
ergonomics.healthandsafetycentre.org/calculator/ergo/ppcc/resources/PPCGuidanceSheet.pdf

MSI Prevention Guidance Sheet: Risk Factor — Pushing/Pulling/Carrying
(Workers' Compensation Board of B.C.)

Hoozemans, M.J.M. et al. Mechanical loading of the low back and shoulders during pushing and pulling activities. *Ergonomics*, 15 January, 2004; Vol 47, No. 1: pp 1-18. Available from the Alberta Government Library - Labour Building (see page 15).

LIFTING AND HANDLING Loads

by Juliet Kershaw

At your work site, jobs that require workers to handle loads may have taken a back seat in previous hazard assessments. This kind of work deserves a closer look. Jobs that entail moving boxes, stocking shelves or lifting (whether patients, cartons or bags of money!) are increasingly laying people up, and causing them to be off work.

The OHS Code requires employers to assess hazards associated with any task that involves manual handling of loads.

At big industrial and institutional sites, the movement to arrest the persistent rise in injuries caused by overexertion is well underway. The grocery industry, for instance, has introduced trolleys, handcarts, wheeled drums and other equipment to reduce manual handling and is watching overexertion injuries decrease. But much is left to be done throughout the province.

The OHS Code requires employers to assess hazards associated with any

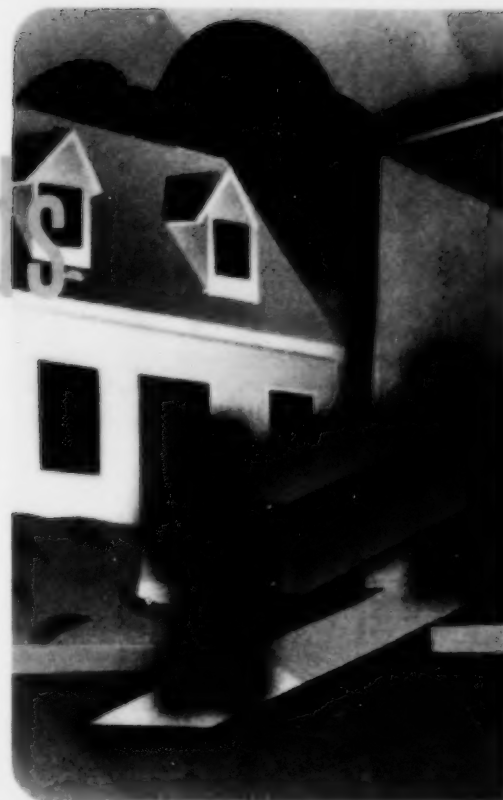
task that involves manual handling of loads, for example, hauling sacks of flour at a bakery or moving clients in and out of wheelchairs in long-term care facilities. This means taking a thoughtful and thorough approach to not only identifying hazards but also introducing safe work practices. After completing a hazard assessment, employers are required to put injury controls in place. Where lifting and loading jobs expose workers to potential injury, the manual handling component must be minimized if it can't be completely eliminated.

Lastly, employers must train their employees to operate equipment competently, and to know and adhere to safe work practices. If a company manages to reduce or eliminate manual handling by introducing new equipment, employees must be trained to use the equipment and demonstrate their competence in that regard.

Changes urgently needed

For at least the past six years, overexertion has been the number one contributor to strains, sprains and tears. Overexertion, which often occurs in manual handling activity, can cause soft-tissue, or musculoskeletal, injuries (MSIs) such as back strain, wrist or ankle sprains, muscle spasms and tendinitis.

"Soft-tissue injuries represent a very significant problem that's just getting



worse," notes Ray Cislo, an Alberta Human Resources and Employment ergonomic specialist. The task force that provided advice about updating the occupational health and safety legislation looked at work and injury trends and specifically requested that the new legislation address issues related to MSIs.

The link between lifting and injury is conclusive, reports Calgary-based ergonomic consultant Margo Fraser. When you lift something, the load on your spine increases, and your spine can only bear so much loading before it is injured. New research shows that cumulative loading – repeating the same load-bearing activity over a period of time – poses just as much of a risk as peak load bearing.

"Employers must train their workers to use good body mechanics,"



KNOW THE CODE

emphasizes Fraser. Workers could save untold hours and years of future back pain if they habitually practiced three crucial lifting techniques: maintaining low back curve, never twisting and keeping the load close.

THE CHALLENGES

Identifying risks

"Not all manual tasks will cause injury, so a hazard assessment is particularly useful," notes Cislo. Once employers understand how to conduct thorough hazard assessments, they will better understand the risks

associated with manual handling activities and ways to reduce the risks.

Solving design problems

Fraser suggests that many employers often lack know-how in solving design problems. The design of equipment, work flow and storage, and the movement of goods can significantly affect the amount of manual handling required. Properly designed work spaces that reduce the number of times workers must handle something can also improve productivity, Cislo points out.

In Fraser's experience, employers may identify the cause of an injury as overexertion, but be unable to explain what caused it. "Was it due to poor lifting technique or because the item had to be lifted from the floor instead of from shoulder height? Or was there no lifting equipment the worker could use?"

Managing costs

"Employers can always improve their work sites, even when resources are scarce," Fraser says. "The most important change is mindset: you have to use your resources creatively. It's small businesses that get caught, because they don't have a lot of cash, and don't know what to do or where to go for help."

Minimizing manual handling does not necessarily mean investing in expensive new equipment. Purchasing an overhead crane, complete conveyor or lift system may not be the only answer. Cislo recommends that employers start with the simplest interventions and then look closely at work flow. On the other hand, employers who are planning to build or renovate may find opportunities to incorporate new work processes and equipment to eliminate manual lifting.

As well, Cislo says, even when an employer makes a substantial investment initially, the payback period should be "very reasonable." Introducing conveyors or rollers, redesigning work flow and/or making equipment modifications and minimal equipment purchases will achieve surprising results.

Training workers to use good body mechanics incurs no costs other than the resources allocated to training and the time supervisors spend encouraging staff to think about ways of improving materials-handling work.

HELP IS AT HAND FOR BUSINESSES OF ALL SIZES

Various Alberta Human Resources and Employment resources provide some good information on lifting and handling loads.

The OHS Code Explanation Guide, your idea book, identifies and explains numerous ways to determine and implement changes at a work site. The guide focuses on less expensive, easy-to-introduce interventions.
www.whs.gov.ab.ca/law/ohs_regcode_down.asp

A series of three bulletins about Back Care and Lifting, www.whs.gov.ab.ca/publications/bulletins.asp offers hundreds of ideas to reduce manual handling: Part 1, Reviewing the Issues; Part 2, Assessing Ergonomic Hazards; Part 3, Reducing Ergonomic Hazards. Part 2 includes an entry-level assessment tool to help determine whether a job has the potential to cause injury and what might be changed.

A list of occupational health and safety consultants, including ergonomists, identifies people who can help. www.whs.gov.ab.ca/network/condir/

The "Real World Solutions" column, a regular feature in this magazine, illustrates many ways to minimize manual handling.

In addition, catalogues from shipping, packaging and safety supply companies can be sources of new ideas and inexpensive solutions to problems. Call the supplier and ask if the company provides suggestions for work flow or work-site modifications with a purchase.

Getting advice

Ergonomic consultants can help employers with hazard assessments, work flow and training. To ensure that someone in the organization can continue the consultant's efforts, employers might consider a "train the trainer" approach.

Fraser finds that employees are often the employer's best resource because they know their jobs best. "Employees can come up with brilliant ideas," Fraser says, "from designing devices that save themselves pain to saving their employers money."

Juliet Kershaw is an Edmonton-based writer and editor and a former editor of this magazine.



WEB LINKS

www.ergoweb.com/resources/faq/concepts.cfm
Ergonomics Concepts

www.ergonomics4schools.com/lzone/handling.htm
Manual Handling (Ergonomics 4 Schools)

www.wcb.ab.ca/pdfs/ergobk.pdf
Office Ergonomics (WCB-Alberta)

www.ohsah.bc.ca/media/MSIP%20Implementation%20Guide.pdf
Musculoskeletal Injury Prevention Program (MSIPP) Implementation Guide (OHSAH)

www.osha.gov/ergonomics/guidelines/nursinghome/
Ergonomics: Guidelines for Nursing Homes (OSHA)

www.ace-ergocanada.ca
Association of Canadian Ergonomists

ON THE ALBERTA GOVERNMENT LIBRARY - LAMAR BUILDING

For contact information, see page 15.

Videos

Lifting and Carrying 10 min.

The construction of the spine and its limitations; how and why injuries occur if we do not respect these limitations and use correct lifting and carrying techniques. (VC 0350)

Your Back at Work 18 min.

Information for workers on how to protect their backs, both at home and on the job, including exercises to help prevent back injuries. (VC 0192)

Back Safety 9 min.

How your back works; simple steps to take to protect your back; how to lift and carry safely. (VC 0355)

WHO'S AT RISK IN ALBERTA?

A young worker hauls a bag of cement mix that's too heavy, overestimating his strength.

A caregiver twists suddenly when shifting a patient, overestimating her agility.

A retail clerk spends too many hours stacking cases of beer, unaware of the fact that repetitive motion can injure as severely as sudden or stressful actions.

Lifting and loading are intrinsic to industrial settings but by no means exclusive to them. Think of health care facilities, office blocks and big box stores. Some workplaces like warehouses and trucking depots exist only to move materials around, but today more and more retailers operate like warehouses and face the same challenges in preventing overexertion injuries.

While injuries from lifting, loading, pulling or pushing can happen to anyone in any industry, some occupations put workers at greater risk. In 2003 the Workers' Compensation Board-Alberta reported that ten industries or sectors had the highest rate of sprains, strains and tears caused by overexertion or bodily reaction and exertion. They were:

Food processing (dairy) • Wholesale and retail trade • Logging
Trucking (except oil) • Mining • Road construction • Health care
Long-term care • Wholesale trade (electronics) • Industrial machinery
Food products manufacturing

Reporting on RECENT CONVICTIONS

under the Occupational Health and Safety Act

EMPLOYER/PRIME CONTRACTOR

TransAlta Corporation

INCIDENT

On August 13, 2002, a worker employed by Lockerbie and Hole was seriously injured at the TransAlta Corporation Keephills Generating Plant while repairing a coal conveyor system. The plant operator had removed the locks and tags from the conveyor system. When the control room operator started the conveyor, the worker was carried down the conveyor.

VIOLATION

TransAlta Corporation entered a guilty plea to a charge under section 37(1)(a) of the General Safety Regulation: failing to ensure an alarm system was installed where there is no clear view from the control panel or operator's station of the machine's moving parts at start-up.

FINES

TransAlta Corporation was fined \$25,000 plus a \$3,750 victim surcharge, and has agreed to donate \$25,000 to the Parkland Ambulance Authority.

EMPLOYER

Alpine Drywall Plastering and Interiors, Red Deer

INCIDENT

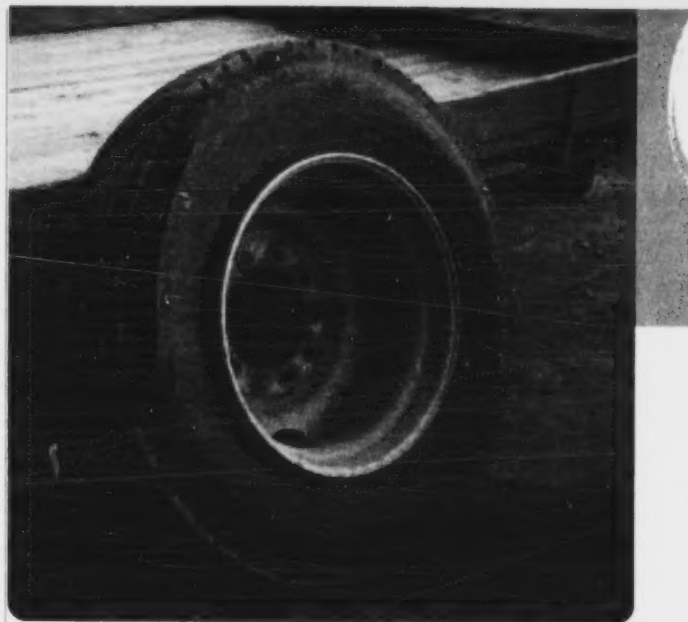
On November 7, 2002, an employee of Alpine Drywall Plastering and Interiors was fatally electrocuted at a work site near Ponoka. The incident occurred when the employee, who was working from a scissor lift accompanied by the foreman, made contact with an overhead power line.

VIOLATION

The foreman was charged with failing to take reasonable care to protect the health and safety of other workers under his supervision.

FINES

The foreman was fined \$10,000 plus a \$1,500 victim surcharge.



SERVICING

by Verleen Barry

Inflating a truck tire may seem like a simple, non-hazardous task...until you realize that a 20-inch tire inflated to 100 psi can contain up to 40,000 lbs. of explosive force! A properly maintained tire can accommodate this amount of pressure, but one that has been used while flat or under-inflated can present significant risks. The ply cords in the tire sidewall may have lost their strength and have become permanently damaged. One or more of the weakened cords may then break during inflation, thus placing more stress on the adjacent cords. Cord failures then continue until a rupture occurs and the sidewall "zippers" (see photo).

Mounting tires and rim assemblies can also be dangerous, since mismatched components can fly apart with explosive force.

In the last few years, the province's Workplace Health & Safety staff have investigated two fatalities and two serious incidents that occurred while Alberta workers were servicing tires or rim assemblies that failed. In each case, the worker was inadequately trained to safely service the tire and/or was not using the proper safety equipment. Two workers sustained serious injuries when struck by a tire that had zippered, one was killed when inflating a tire that contained a mismatched tire and rim, and another was killed when a multi-piece rim separated during tire inflation and the components struck the worker.

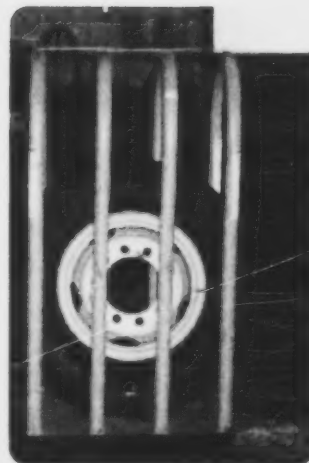


TRUCK TIRE and Rim Assemblies

SAFE PRACTICE GUIDELINES for servicing large vehicle tires and rims

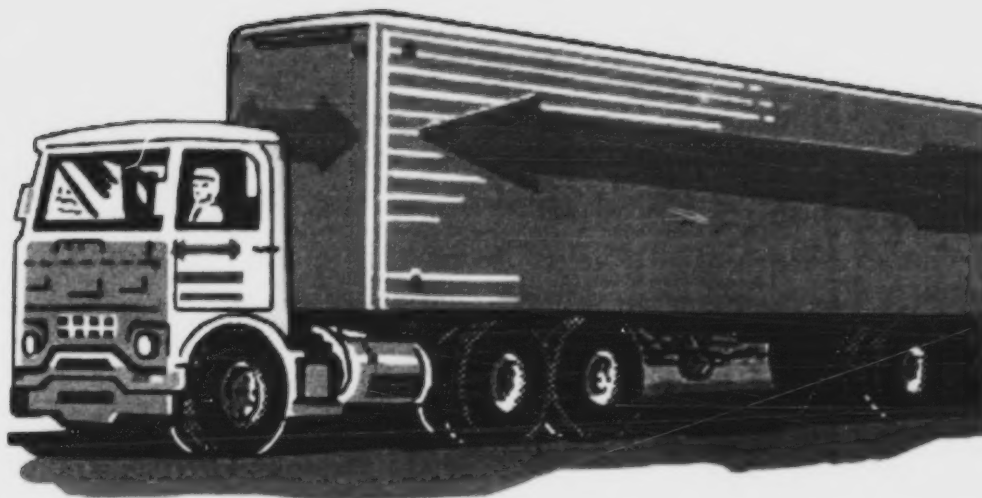
- Do not mount or remove tires without proper training.
- When inflating a tire, always place it in a safety cage or have it similarly restrained (see photo). Follow the safety instructions for using the cage.
- Use a remote inflation device with an extension hose, air gauge and clip-on chuck. See illustrations in the OHS Code Explanation Guide, Part 12, Section 193 (URL provided in box at right).
- Stay out of the trajectory zone – the path or area where a tire and rim assembly may travel if the tire separates from the rim or the tire zippers and the explosive force propels the components across the work site (see illustrations in the OHS Code Explanation Guide).
- On split rims, ensure that the parts match. The numbers stamped into the rim must match the lock rings. If the numbers are not legible, or do not match, do not use these parts. Never weld or modify rim components. Always check rims for damage such as dents or "out of round," and corrosion.
- Do not attempt to seat rim components by hammering on them when the tire is inflated or partially inflated.
- Never introduce a flammable substance such as ether into a tire (to aid in seating the tire bead).
- Don't overload or over-inflate a tire.
- Always follow the manufacturer's specifications when servicing tires and rims.
- Match tires with rims of the appropriate size.

Verleen Barry is an occupational health and safety officer with the Alberta government.



For full details of the safety requirements for tire servicing, see section 193 of the Occupational Health and Safety Code, www.whs.gov.ab.ca/publications/pdf/OHSC-1.pdf, and the accompanying explanation in Part 12 of the OHS Code Explanation Guide, www.whs.gov.ab.ca/law/pdf/ohsc_p12.pdf.

See also Safety Bulletin on Servicing Tires Safely, www.whs.gov.ab.ca/publications/pdf/gs003.pdf.



by Bill Corbett

Alberta's upstream oil and gas industry is littered with potential hazards. Heavy equipment, whirring pieces of drilling pipe, high-pressure fracturing and hydrogen sulphide gases are just some of the safety issues workers must contend with. Yet the single most dangerous thing they face on a daily basis has four rubber wheels.

"It seems banal, but vehicle collisions are the single largest cause of fatalities and injuries in our industry," says Murray Sunstrom, executive director of the Canadian Petroleum Safety Council. "It's shocking, considering the things we do as an industry."

The shocking statistics

Vehicle collisions are the number one cause of death in Alberta workplaces, responsible for more than 30 per cent of all fatalities. In 2001, for example, 36 people were killed in work-related vehicle incidents (23 of them involving single vehicles).

Although 9 of the 36 fatalities were in the upstream petroleum industry, a Workers' Compensation Board-Alberta report notes that transportation and communication companies, governments, education and health organizations, construction firms, and wholesale and retail sales companies also register high WCB claims for vehicle collisions. In 2002 motor vehicle incidents accounted for more than \$46 million in WCB-Alberta claims. The frequency of claims is decreasing in other provinces but rising in Alberta, which has one of Canada's highest collision fatality rates.

Typical examples of vehicle incidents in the workplace include workers being run over by trucks, large vehicles

rolling over and road workers being struck by passenger vehicles. But a large number – perhaps the majority – of these incidents occur during the drive to and from the job site. Many of the causes are ones that afflict all drivers, for example, driving too fast or aggressively, following too closely, running off the road, turning left in front of oncoming traffic, inattention, fatigue and impairment from alcohol or drugs.

Workers in many industries and many parts of Alberta face additional challenges such as driving on rough, remote, unfamiliar and poorly maintained roads at all hours and in all weather – sometimes at the end of a long shift.

The trucking industry, obviously, has a high percentage of its vehicle incidents on the job. From 1995 to 1999, nearly 2,600 large trucks were involved in casualty incidents in Alberta. During this period, 30 truck drivers were killed, primarily in single-vehicle rollover incidents. Alberta Transportation statistics show that while alcohol was unlikely to be involved in these crashes, fatigue was often a factor; when it was, such incidents tended to occur between 11 p.m. and 11 a.m. Nearly 60 per cent of these casualty collisions involving a large truck occurred on dry roads, and only 28 per cent on snow, slush or ice.

Vehicle collisions are the number one cause of death in Alberta workplaces, responsible for more than 30 per cent of all fatalities.



TACKLING ALBERTA'S HIGH

Vehicle Collision Rates

Taking action

Alberta's trucking industry is working hard to reduce its collision rate. For example, the Alberta Motor Transport Association has seen a significant increase in the number of trucking companies joining the provincial Partners in Injury Reduction program and then proceeding to complete the Certificate of Recognition program. As a result, WCB-Alberta returned more than \$3.8 million this spring to trucking companies participating in these programs. It has also rewarded an improved trucking safety performance by lowering the industry's projected premium rates by 7.6 per cent for 2005.

"I think it's a combination of things," says Spencer Hempstock, who oversees Alberta Motor Transport Association safety programs. "Drivers are more aware, and companies are becoming more involved in training and other programs."

In 1999, the Alberta Motor Association launched Mission Possible @ Work, an employee traffic safety program that combines awareness, education and activities to combat unsafe driving habits. To date, more than 200 companies with 25,000 employees have enrolled, with strong participation from major industries such as petroleum, trucking, forestry, chemical and manufacturing. The program takes about 18 months to complete and addresses such topics as speed, inattention, animal hazards, fatigue, and winter and holiday driving.

"The level of awareness about road safety has risen to the point where industry is doing a lot of work to deal with the issue," says Mission Possible @ Work coordinator Sandra Rourke. "The focus is on changing the attitudes and behaviours of drivers. The emotional part of this issue is also very important – getting across the message that vehicle collisions affect us all."

Alberta's upstream petroleum industry has been one of the most proactive sectors in addressing safe driving in the workplace. Canadian Petroleum Safety Council initiatives include some hard-hitting billboards and a series of

Driver

SAFETY TIPS

Some 90 per cent of vehicle collisions involve driver error. Following too closely, running off the road and turning left in front of oncoming traffic are three of the leading causes of such collisions. Here are a few tips to avoid becoming a statistic:

Wear your seatbelt. Vehicle occupants not wearing seatbelts are 2.5 times more likely to be injured, while front-seat passengers wearing a seatbelt are 45 per cent less likely to be killed in a collision.

The speed limit is not a target. U.S. studies indicate 30 per cent of all fatal collisions involve speed as a major contributing factor. If you're driving 100 km/hour when you brake for an obstacle 70 metres ahead, your vehicle will hit it at 44 km/hour. If you're driving 120 km/hour, the collision speed will be 93 km/hour, producing an impact that can be fatal.

Pull over to make or receive a cell phone call. A recent study suggests that taking a cell phone call while driving can quadruple the risk of collision.

Don't drive if you're sleepy. During a three-to-five-second nod-off, a vehicle going 120 km/hour can travel 150 metres.



"Transportation Tuesday" bulletins focusing on specific issues such as seatbelts and road rage. Recently the council developed a checklist for companies to fill in after a collision. The purpose of the checklist is to collect detailed data that can be shared industry-wide.

"Surprisingly, we as an industry don't even collect standard collision data," says the Petroleum Safety Council's Murray Sunstrom. "We're starting to look at this issue more comprehensively, from a more evidence-based perspective. We know that speeding, for example, can be an issue, but it's just one symptom of a larger disease. We need to address the larger picture."

"Drivers are more aware, and companies are becoming more involved in training and other programs."

To help gather and assess accurate, useful data, the Petroleum Safety Council has enlisted the aid of Dr. Louis Francescutti and Dr. Peter

Rothe of the Alberta Centre for Injury Control and Research based at the University of Alberta. "No one is actively keeping track of why these things are happening," says Francescutti, the Centre's director. "Our approach is to analyze information and then go to the literature to see what works, apply it and then get feedback. Our goal is to develop the world's most sophisticated ground traffic surveillance system."

Suppose, for example, that vehicles on a stretch of an Alberta highway were hitting a large number of deer. Researchers would review the literature to look for solutions that have worked elsewhere. If they found that other jurisdictions have erected temporary warning signs that resulted in significantly fewer animal strikes and slower speeds during busier periods of deer movement, such a program could be tested here and its success monitored.

"I think the hardest part of the equation is getting good information into the system," says Francescutti. "Once you can present convincing statistics of what can be done to change a situation, then I think people's behaviour starts to change."

Bill Corbett is a Calgary writer.

WEB LINKS

www.psc.ca/psc_projects/driving.htm
Canadian Petroleum Safety Council Work Driving Initiatives

www.psc.ca/psc_projects/driver_links.htm
Driving Safety Information Links (Canadian Petroleum Safety Council)

www.med.ualberta.ca/acicr/pages/abprogs/missposs.pdf
Summary Form for Mission Possible @ Work

www.cgpsa.com/Safety/Mission%20Possible%20Workshop.pdf
Mission Possible Bulletin

www.wcb.ab.ca/pdfs/driving_safely.pdf
WCB-Alberta brochure, "Safe Driving Behind the Wheel"

www.nurses.ab.ca/issues/Safe%20Driving.html
Safe Work Driving for Nurses (Alberta Association of Registered Nurses)

IN THE ALBERTA GOVERNMENT LIBRARY - LABOUR BUILDING

For contact information, see page 15.

Videos

Blindfold Effect (The)

This dramatic and award-winning video with unique interactive format focuses on three driving situations that occur in more than half of all collisions: following too closely, intersections and backing up. Collision reenactments and demonstrations of safe driving procedures teach tactical driving techniques. (VC 0407)

Defensive Driving for Government Employees

Applicable to anyone who drives on the job, this program covers defensive driving, respect for the vehicle, your responsibilities as a driver, proper/safe driving techniques, seatbelts, driving in poor weather, speeding, right-of-way, passing, tailgating, distractions and road rage. (VC 0384)

Oilfield Driver Training Program

Developed in response to recommendations from the Upstream Petroleum Industry Task Force on Safety, this program covers moving equipment, winching, picker and crane operations, securing loads, and rig moves. The focus is specific training for heavy haulers in the Upstream Petroleum Service Industry. (VC 0261)

Road Kill: The Attitude

Your attitude affects the way you drive. (VC 0292)

Road Kill: The Consequences

The consequences of speeding include traffic tickets, loss of license, higher costs of insurance and costly speed-related incidents. (VC 0293)



From the Courtroom

by Tamara Trull

Alternative Sentencing in OHS Prosecutions

In addition to or as an alternative to imposing fines and/or imprisonment, section 41.1 of the Occupational Health and Safety Act allows the court to order the offender to do virtually anything it considers appropriate. This new section creates an opportunity for an endless variety of alternative sentencing options.

For example, in the past year the courts have imposed the following creative sentences for violations of the occupational health and safety legislation:

- **R. v. Rampart Steel**, Unreported, May 5, 2004, Tilley, J. (Alta. Prov. Ct.)

In this fatality case, the court ordered Rampart Steel to contribute \$95,000 to develop an Industry-Related Practice for steel work in addition to a \$5,000 monetary fine.

- **R. v. ARC Resources Ltd.**, Unreported, January 15, 2004, Pahl, J. (Alta. Prov. Ct.)

In this fatality case, ARC Resources Ltd. contributed \$50,000 to S.T.A.R.S. Air Ambulance in addition to paying a monetary fine of \$30,000.

- **R. v. Burlington Resources Canada Ltd.**, Unreported, December 19, 2003, Mitchell, J. (Alta. Prov. Ct.)

In this fatality case, Burlington Resources Ltd. contributed \$100,000 to the Job Safety Skills Society in addition to paying a monetary fine of \$5,000.

Sentences that include requirements to provide training or educational programs are strong preventative tools in avoiding future accidents, injuries and fatalities. Sentences that educate workers, employers, industry and the public may prove more useful in some situations than merely imposing significant fines.

Although the courts have the ultimate discretion in imposing alternative sentences, the Occupational Health and Safety Prosecution Unit of Alberta Justice is developing sentencing guidelines to ensure that section 41.1 is utilized to its maximum potential in an innovative and ethical manner.

To suggest topics for future columns, please send a message to Tamara.Trull@gov.ab.ca or Brian.Caruk@gov.ab.ca.

Tamara Trull is a Crown Prosecutor in the Occupational Health and Safety Prosecution Unit of Alberta Justice

Workplace Health & Safety (WHS)

Contact Workplace Health & Safety any time

For occupational health and safety information and assistance, or to order Workplace Health & Safety publications, phone the Contact Centre at 1-866-415-8690 (415-8690 in Edmonton and area) or visit the Workplace Health & Safety Web site at www.whs.gov.ab.ca/expert.



Sign up for
Workplace Health
& Safety news

To be notified by e-mail of all new Workplace Health & Safety Web site postings, sign up for a FREE subscription service through www.worksafely.org.

Alberta Government Library Labour Building Site

To review the large selection of occupational health and safety information materials available through the Alberta government, go to www.gov.ab.ca/hre/library.

To borrow materials, either contact your local library and make your requests through the inter-library loan system or visit the Alberta Government Library, Labour Building Site, at this address:

3rd floor, 10808 - 99 Avenue
Edmonton, AB T5K 0G5

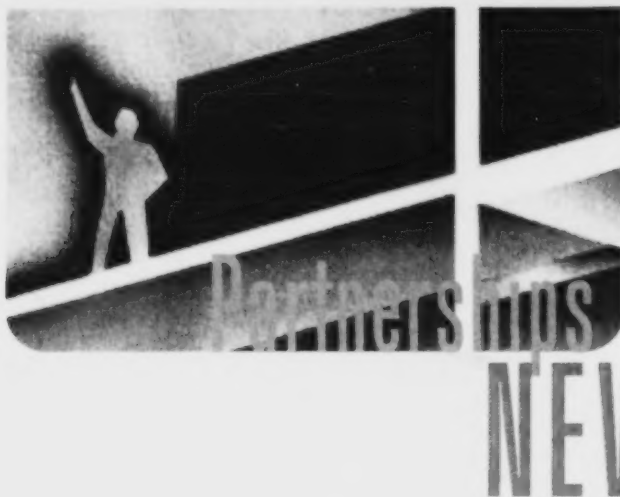
Library phone (780) 427-8533

Audio-Visual Services phone (780) 427-4671

To reach either of the above numbers toll-free in Alberta, dial 310-0000 followed by the area code and phone number.

Fax (780) 422-0084

Workplace Health & Safety is a division of Alberta Human Resources and Employment and falls under the jurisdiction of Minister Clint Dunford.



New Partners in Health and Safety

Welcome to:

- Pratt & Whitney Canada, Lethbridge (see profile on page 20)
- Safe Communities Coalition of Central Alberta, Red Deer

Each of the 67 Partners in Health and Safety (see complete list on page 17) has an exemplary health and safety management system and is recognized as a leader. These Partners have made a commitment to leveraging their influence throughout their industry and taking a proactive role with provincial Workplace Health & Safety staff in promoting workplace health and safety across the province. Partners receive public recognition for their leadership.

Certificate of Recognition Holders: You Did It Again!

In May 2004 the Workers' Compensation Board-Alberta refunded a record \$47.3 million to holders of the Certificate of Recognition who were registered in the Partners in Injury Reduction program for 2003. The approximately 4,700 employers who met the program requirements for the Certificate of Recognition as of December 31, 2003, shared in this record refund. This brings the four-year total Partners in Injury Refund for COR holders to \$122.1 million.

Overall, those who hold a Certificate of Recognition are experiencing 13.5 per cent fewer lost time claims and 28 per cent lower first-year claims costs than those who do not have the Certificate. Thanks to their efforts, fewer Albertans are being injured at work. Also, these reduced injury rates are helping employers to reduce their WCB insurance costs and make their operations more profitable.

Changes and Updates

- Does your employer or sub-contractor have a valid Certificate of Recognition? To find out, visit our Web site, which is updated weekly: www.whs.gov.ab.ca/partners/pdf/cor.pdf
- Medium Employer Certificate of Recognition. The Certifying Partners have approved in principle a new program for medium-sized businesses with 11 to 30 workers. For information about the program, called MECOR, please contact one of the Certifying Partners.

- Different way to interview workers. The Partnerships program now allows the use of written questionnaires in lieu of face-to-face interviews with workers for Certificate of Recognition purposes, within certain limitations. This change is a response to an ongoing challenge facing the auditors in some industries – geographical and logistical issues sometimes made it difficult to obtain the required number of in-person interviews. In the fall of 2003 several Certifying Partners piloted a proposed written interview questionnaire and found it was a valuable tool for validating employee responses when assessing health and safety management systems. For more information, please contact your Certifying Partner.

2004 Targeted Employer Program

Members of the Partnerships team plan to visit 300 of the employers who have a lost time claim rate above the provincial average. During these visits, the Partnerships consultant will discuss the benefits of developing and implementing (or improving) the company's or agency's health and safety management system.

Provincial government occupational health and safety officers will also review the employer's lost time claim history and inspect the work site to identify any instances of non-compliance with the Occupational Health and Safety Act, Regulations and Code, and offer suggestions for improving health and safety. Depending on the severity of the situation, orders may be written and compliance dates assigned for having the variance(s) corrected.

Partnerships in Health and Safety is a province-wide injury prevention program sponsored cooperatively by government, labour and industry.

The Partnerships program offers:

- tools to implement a health and safety management system
- guidance in applying for a Certificate of Recognition (COR)
- the potential for premium refunds from the Workers' Compensation Board-Alberta

For more information, call (780) 427-8842 or toll free 310-0000. Or visit us on the Web: www.whs.gov.ab.ca/partners.

Partnerships

IN HEALTH AND SAFETY

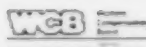
Celebrating 15 Successful Years

Since it was established 15 years ago, the Partnerships in Health and Safety program has experienced a remarkable rate of growth and many successes:

- 67 Partners are formally committed to promoting and improving health and safety within Alberta.
- 15 Certifying Partners provide valuable input about ways to make the program more effective and help to deliver the program to Alberta employers.
- The Workers' Compensation Board's Partners in Injury Reduction program provides financial incentives to the 4,700 Alberta employers who hold a Partnerships in Health and Safety Certificate of Recognition. (A list of COR holders is available at www.whs.gov.ab.ca/partners/pdf/cor.pdf.)
- The Partnerships in Health and Safety model can now be accessed in British Columbia, Ontario and Nova Scotia, as well as in other countries around the world.

Certifying Partners

Alberta Association for Safety Partnerships (AASP)
 Alberta Construction Safety Association (ACSA)
 Alberta Food Processors Association
 Alberta Forest Products Association (AFPA)
 Alberta Hotel Safety Association (AHSA)
 Alberta Long Term Care Association (ALTCa)
 Alberta Motor Transport Association (AMTA)
 Alberta Municipal Health and Safety Association (AMHSA)
 Alberta Personnel Administration Office (PAO)
 Alberta Safety Council (ASC)
 Alberta Safety Council for Seniors Housing (ASCSH)
 Manufacturers' Health & Safety Association (MHSA)
 Petroleum Industry Training Service (PITS)
 Textile Rental Institute of Alberta (TRIA)
 Western Wood Truss Association of Alberta



PARTNERS IN HEALTH AND SAFETY

Alberta Energy and Utilities Board
 Alberta Environment
 Alberta Home Builders' Association
 Alberta Iron and Steel Safety Council
 Alberta Restaurant and Foodservices Association
 Alberta Sustainable Resource Development
 Alberta Transportation
 Anadarko Canada Corporation
 Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA)
 ATCO Electric
 BP Canada Energy Company
 Boyd PetroSearch
 Building Operators Association (Calgary)
 Calgary Airport Authority
 Canadian Association of Geophysical Contractors (CAGC)
 Canadian Association of Oilwell Drilling Contractors (CAODC)
 Canadian Association of Petroleum Producers (CAPP)
 Canadian Energy Pipeline Association (CEPA)
 Canadian Fertilizers Limited
 Canadian Petroleum Safety Council (PSC)
 Canadian Plastics Industry Association—Western Region
 Canadian Society of Safety Engineering (CSSE)
 Cargill Foods
 Celanese Canada Inc.
 CESSCO Fabrication & Engineering Ltd.
 Chevron Canada Resources
 City of Medicine Hat
 ConocoPhillips Canada Limited
 Construction Owners Association of Alberta (COAA)
 Daishowa-Marubeni International Ltd. (DMI)
 Devon Canada Corporation
 Dow Chemical Canada Inc.
 Environmental Services Association of Alberta (ESAA)
 EPCOR
 Flint Field Services Ltd.
 Fluor Canada Inc.
 Fluor Constructors Canada, Ltd.
 GE Energy Services, Calgary
 Goodyear Canada Inc.
 I.A.T.S.E. Local 212
 Imperial Oil Resources
 Job Safety Skills Society (JSSS)
 KeySpan Energy Canada
 Lakeside Packers
 Mullen Transportation Inc.
 OHSMP High River and District
 Petro-Canada Oil & Gas; Western Canada Development & Operations
 Petroleum Services Association of Canada (PSAC)
 Pratt & Whitney Canada
 Printing and Graphics Industries Association of Alberta (PGIA)
 Propane Gas Association of Canada Inc. (PGAC)
 Remedy Energy Services Inc.
 Rogers Sugar Ltd.
 St. John Council for Alberta
 Safe Communities Coalition of Central Alberta
 Schlumberger Canada Ltd.
 Shell Canada Limited
 Small Explorers and Producers Association of Canada
 Spray Lakes Sawmills (1980) Ltd.
 Standen's Limited
 Suncor Energy Major Project
 Syncrude Canada Ltd.
 TransCanada Pipelines Limited
 Transline Energy Services Ltd.
 Transline Ltd.
 Veritas DGC Land
 Waiward Steel Fabricators Ltd.

FIRST ANNUAL AWARDS for

Innovation in Workplace

by Kerry Tremblay

AWARDS 2004

Mining and Petroleum Development

- Akita Drilling Ltd., Nisku (Award of Distinction)
- Oil Sands Safety Association (OSSA), Fort McMurray (Award of Merit)

Manufacturing and Processing

- Procor Limited, Edmonton (Award of Distinction)

Construction and Construction Trade Services

- Aluma Systems Canada Inc., Edmonton (Award of Distinction)
- Beck Technologies, Camrose (Award of Merit)

Public Administration, Education and Health Services

- Calgary Health Region, Calgary (Award of Distinction)
- University of Lethbridge (Award of Merit)

Workers constantly struggle to get a task done effectively while also getting it done safely. The seven winners of Work Safe Alberta's first Annual Awards for Innovation in Workplace Health and Safety have found ingenious ways to resolve this ongoing challenge. These companies and agencies have what it takes to develop new and safer ways to tackle problems: a thorough understanding of the issue, a lot of effort, in some cases seed money for research and development, and a pinch of ingenuity.

Whether the problem involves using a ladder on uneven ground, moving a patient from a wheelchair to a bed or working alone late at night in a deserted building, the award winners have "demonstrated new thinking with new concepts that are not widely used in any industry," says Mark Rice, a consultant with the Work Safe Alberta Secretariat.

This year, the award winners (see sidebar) were announced at the Minister's Forum on June 2, 2004. They were chosen from a field of 58 applicants in eight industry sectors.

University of Lethbridge

Ross Caffyn, occupational health and safety officer at the University of

Lethbridge, recalls talking to a buddy at the university who said he didn't want to bother calling security to let them know he was working alone at night. This was a story Caffyn had heard before. But when the friend said he would consider checking in and out online, an idea was born. Like many employers, the university had been struggling to keep track of people working late and alone, either in their offices or in laboratories scattered across the campus. "It was a fluke," says Caffyn, referring to how the idea popped up casually during a conversation. He says the university's Web-based working alone log-in system didn't take long to develop once the idea surfaced.

Beck Technologies

Another award-winning invention was triggered when Jason Beck fell off a ladder at work, shattering his ankle. He called his dad, Hal, not because he wanted reassurance, but because Hal is a handy kind of guy who could probably invent a ladder that could be used on stairs or uneven ground. After eight years of developing prototypes and getting patents and CSA approval, the product is now launched. The father-and-son team has invented the Leveladder™, which attaches to the legs of aluminum or fiberglass extension

Health and Safety



Jason and Hal Beck with their Leveladder™.

ladders, allowing the ladders to be used just as Jason wanted – on uneven terrain. The devices look like extensions to the base of the ladder, but bolt to the sides and can be adjusted to different heights. This makes it possible, for example, to place one ladder leg on one step and the other leg down on another stair. The extensions also come with ice picks for the feet, so they can dig in on slippery ground. Leveladder devices are currently being marketed across Western Canada at selected stores.

Aluma Systems Canada Inc.

When clients asked the team at Aluma Systems to come up with a better, safer way for workers to access scaffolds from a ladder, they accepted the challenge. Under the old scaffold system, explains Mark Lindenbach, Aluma's corporate safety manager for western Canada, the worker would climb up the ladder to the scaffold, then lift the bar that was the gate, climb onto the scaffold and latch the bar. That meant the worker had difficulty keeping three-point contact with the ladder (two feet, one hand or two hands, one foot) when arriving at the scaffold.

The solution, says Lindenbach, was in thinking about the motions that needed to happen. Instead of lifting UP the gate bar, what would happen if

workers just pushed it IN, much like a saloon door, as they climbed onto the scaffold and then latched it in place? (Unlike a saloon door, however, the door does not swing both ways.) Since the gap below the original crossbar gate was also a problem, the gate could become solid with the new "saloon door" design. And toe boards wouldn't be a tripping hazard if they became part of the new doors, rather than attached to the floor. The product is now being used at industrial sites around North America.

Calgary Health Region

A new approach to an old and costly problem won the Calgary Health Region its award. The region has introduced trained and dedicated transfer teams that specialize in lifting patients on targeted hospital units. This approach has helped to reduce the number of back injuries suffered by nurses, who normally have to lift and transfer patients between wheelchairs and beds, toilets and wheelchairs, and perform other lifting and transfer tasks. Gene Shematek, the OH&S practice leader with Telus Sourcing Solutions, which provides OH&S services for the Calgary Health Region, says the number of days lost to back injuries on the units involved in a pilot project over one year

dropped by over 75 per cent. Because of its initial success, the project has been continued and expanded.

The award winners have demonstrated new thinking with new concepts that are not widely used in any industry.

The Annual Awards for Innovation in Workplace Health and Safety, which are administered by the Occupational Health and Safety Council, recognize all types of health and safety innovations, including engineering controls that replace personal protective equipment, safety planning at the design stage of a project and other programs or techniques that help prevent workplace incidents, injuries and illnesses. Applications for the 2004 awards will be accepted between October 31, 2004, and February 15, 2005.

For more information about the winners or to apply, go to www.whs.gov.ab.ca/ohscouncil/innovation.asp.

Kerry Tremblay is a Calgary freelance writer specializing in safety and training.

Assembly Plant ACHIEVES SAFETY MILESTONE

by Nordahl Flakstad

Pratt & Whitney Canada's aircraft assembly and testing facility in Lethbridge marked two important milestones last spring. First, the plant – which has been operating since 1993 and employs 100 people – produced its 5,000th aircraft engine (turboprop and turbo-shaft). Second, this high level of production had been achieved without a single lost time incident since March 1994.

A decade of no lost time incidents is unmatched among the many international plants owned by P&WC's parent company, United Technologies Corporation. That says much, since besides Pratt & Whitney the subsidiaries include prominent firms such as Carrier Air Conditioning, Otis Elevator, Sikorsky Helicopter and Chubb Securities. Combined, these companies employ 205,000.

Setting up committees

Broad-based management and employee participation in safety initiatives, which jibes with P&WC's commitment to ISO 14001 environmental management systems, is seen as a major contributor to the plant's exemplary record. Fully 30 per cent of employees serve on one or more of seven Environmental Health and Safety subcommittees coordinated by an EH&S steering committee. Each subcommittee has specialized responsibilities, ranging from incident investigation to safety manuals.

"These committees produce a lot of employee buy-in and involvement," says Glen Lowe, an emergency response training coordinator at the plant who serves on the EH&S steering committee and chairs the audit subcommittee. Lisa Wiegel, another EH&S steering committee member and chair of the communications subcommittee, agrees. "We evolved from having one person responsible for EH&S to having the steering

committee," she says. "There was a conscious recognition that one person couldn't do the job. We had to have more involvement, including by management." (Managers also sit on the EH&S committees.)

Accepting employee suggestions

"The employer incorporates any idea that will improve our machines or our processes and lead to a safer workplace," Lowe says. For example, employees Martin Dixon and Steve Gruca recommended fully enclosed plastic machine-guarding to prevent contact with moving parts on a horizontal balancer that spins at 1,200 rpm, and this enhancement was introduced. Another quickly adopted suggestion was for an emergency response cart to deal with spills and fire. The cart, which is equipped with absorbent spill kits, personal protective items and fire extinguishers, can easily be wheeled to the scene of an incident.

The ingenious emergency response cart has gained recognition for the Lethbridge plant throughout the extensive United Technologies Corporation network – it is now listed as a UTC recommended best practice. (P&WC Lethbridge was nominated for Pratt & Whitney's Environmental Health & Safety Leadership Award this year, as well as for the United Technologies Corporation's Outreach Program and Continuous Improvement awards.)

Sharing information and good ideas

The Lethbridge incident investigation subcommittee not only shares its findings in-house but also passes them on to P&WC headquarters for posting on the company intranet. Frequently, other United Technologies Corporation-owned facilities are alerted as well.



Minister Clint Dunford and staff of Pratt & Whitney Canada celebrate 10 incident-free years.

It's a two-way street, explains Randy Mains, a production coordinator who serves on the EH&S Steering Committee and co-chairs the incident investigations subcommittee. "For instance, if there is an incident with a crane at another facility and we have a crane as well," Mains says, "we'll shut it down and have our maintenance people go over it to ensure that the issue will not occur here."

Providing leadership from the top

One person who has contributed a lot to the success of P&WC Lethbridge is Bill Halley, who became general manager three years ago. Halley hired a full-time safety coordinator, but not with the idea of dumping everything in the coordinator's lap. The aim was to spread responsibility among all employees.

Halley recognizes that employers have a responsibility to make available the necessary time and resources for creating a safe workplace. However, he says, "It's not only a management responsibility to make the policies and theories happen. We have to get the involvement of the people on the floor."

Employees need to be accountable and responsible for their own and fellow employees' safety. To underline

that point, all P&WC Lethbridge employees are asked to set safety goals during their annual individual performance reviews.

Safety comes first. Halley explains it this way: "If an employee builds engines quickly but has a bad safety record, he's not going to get a promotion."

Nordahl Flakstad is an Edmonton writer and communications consultant.

WEB LINKS

www2.ccnmatthews.com/scripts/ccn-release.pl?/2004/04/16/0416043n.html
Pratt & Whitney Safety News Release

www.pratt-whitney.com/about_ehs.asp
Pratt & Whitney, Environment, Health and Safety

IN THE ALBERTA GOVERNMENT LIBRARY - LABOUR BUILDING

For contact information, see page 15.

Videos

Safety Leadership for Everyone

Safety professional Tom Harvey, who describes the traits that make a good safety leader, emphasizes that everyone can be a safety leader. The video covers connecting safety messages with actions, setting examples, why safety prizes often don't work, recognizing safe actions of co-workers and employee-powered safety. (VC 0396)

SAFETY ACHIEVEMENTS of

Pratt & Whitney Canada LETHBRIDGE

- The record of no lost time incidents in 10 years (since March 1994) is unmatched among the many international plants owned by the parent company, United Technologies Corporation.
- An emergency response cart used at the Lethbridge plant is listed as a United Technologies Corporation recommended best practice.
- The number of reported incidents has dropped by 60 per cent over the past three years.



Web Watcher

by Bob Christie

CanQual Takes the Internet to a New Level

A few years ago, prime contractors and site owners were told that incidents on their site (whether involving their own employees or the employees of contractors) would be factored into their statistics. The prime contractors and owners quickly realized that many incidents were partly or wholly the responsibility of their contractors, and consequently began to look at contractor safety procedures and records as a bid pre-qualification. Many larger site owners have implemented their own pre-qualification systems at considerable cost, and some employers use the Certificate of Recognition granted by the Partnerships program for pre-qualifying purposes.

Enter a couple of experienced safety types who have puzzled over pre-qualification safety issues for several years. On March 31, 2004, in a small office in a Sherwood Park business centre, CanQual Inc. (www.canqual.com) was born. Now, for an annual fee ranging from \$500 for contractors doing professional or administrative work through \$10,000 for a major site owner, contractors can complete a profile of their company with all the detail required by prime contractors (verified by the CanQual folks). For prime contractors and owners, finding a list of pre-qualified potential bidders for a job becomes as simple as a few clicks of a mouse. And if contractors don't feel qualified to do their own audit, CanQual will come in and do it for them for a modest fee.

Will CanQual survive the start-up phase? Time will tell, although they appear to be attracting some rather heavy hitters in the site owner category. If CanQual becomes the prime contractors' and owners' preferred method of managing contractor pre-qualification data, contractors who want to play in the big leagues will have to sign on the dotted line.

This is an interesting application of Internet technologies to meet the needs of modern industry.

If you have a leading edge Internet application in health and safety, drop me a note (bob@christie.ab.ca) and we will tell our readers.

Bob Christie is a partner at Christie Communications Ltd., a multimedia development company in Edmonton. Bob supplies most of the Web link resources for the articles in this magazine.



Real World Solutions

What improvements have you made at your workplace? If you've found a solution worth sharing, please send it to ray.cislo@gov.ab.ca

ACCESSING ALL SIDES OF A BULKY OBJECT

THE PROBLEM

Accessing all sides of a pallet load or bulky object may be difficult, especially in a cramped space.



A SOLUTION

Placing the pallet or object on a carousel or turntable allows a worker to rotate the pallet or object with little effort. The carousel or turntable can be on the floor, a workbench or a scissor lift.



BENEFIT

A worker can access all sides of the load without overreaching or getting into awkward body positions.

MOVING PRODUCTS BETWEEN WORKSTATIONS

THE PROBLEM

Carrying product from station to station as part of an assembly process can be inefficient and tiring, and it can lead to back injuries.



A SOLUTION

A flexible portable conveyor can move product efficiently and minimize manual handling.

BENEFITS

Avoids repeated lifting, carrying and lowering, thereby reducing the possibility of arm and back injury. Portable and flexible conveyor systems can accommodate changing or difficult production layouts.

OCCUPATIONAL HEALTH & SAFETY MAGAZINE PUBLISHES WORKPLACE FATALITIES TO REMIND READERS OF THE IMPORTANCE OF WORKPLACE HEALTH AND SAFETY.

The information is not a final investigation report. In many cases investigations are continuing. Final investigation reports are filed at the Alberta Government Library - Labour Building Site and can be reviewed there or on the Workplace Health & Safety Web site at www.whs.gov.ab.ca under Fatalities.

An occupational fatality refers to the death of a worker caused by a work-related incident or exposure. To protect personal privacy, the fatality descriptions do not include the names of the deceased.

Work-related incident fatalities February 2004 – May 2004

Most work-related incident fatalities that fall under provincial jurisdiction are investigated by Workplace Health & Safety. In general, highway traffic, farm, disease or heart attack fatalities are not investigated.

The following fatalities have been or are being investigated.

An 18-year-old quality control technician (test fire) was sitting on a forklift that was being pulled out of the mud by a pickup truck. The truck was equipped with a chain and web strap attached to a hitch ball on the rear bumper. The hitch ball became dislodged, striking the worker on the head. The worker had approximately five weeks of experience on the job.

While working with a crew to pour a concrete floor, a 40-year-old labourer was struck by a 38-metre boom. The king post tubing in the turret assembly of a concrete pump truck failed, and the boom collapsed onto the worker.

A 41-year-old computer numerical control operator was crushed by a lathe. A safety lock device on the enclosure door had been altered. The worker entered the lathe enclosure and was caught between the forward-moving drill bed and the metal enclosure.

A 42-year-old track hoe operator with more than 20 years of experience lost control while driving a pickup truck across a bridge on a forestry road. The vehicle went into the river, and the current took it underneath the bridge. (The death occurred in November 2003, but the worker's body was not found until April 4, 2004.)

A 21-year-old labourer with four years of experience went under a sideboom on a dozer to attach some equipment to a loadline. The boom fell, pinning the worker between the boom and a pipe.

A 25-year-old road trench driller was struck by an unattended backhoe that rolled into the 1-metre deep trench where he was working. The backhoe was parked approximately 6 metres away from the trench, on a slight incline.

A 51-year-old groover (lathe operator) with eight years of experience was operating a lathe when the piece of metal he was working on came off the lathe and struck him in the face.

On a sewage lagoon construction site, a 39-year-old apprentice heavy duty mechanic was electrocuted while attempting to repair a portable light plant that was still energized. The worker had no electrical experience.

While driving on a log haul road, a 27-year-old truck driver failed to execute a sharp right-hand turn because of a failure in the truck's steering system. The load of logs shifted forward and crushed the cab.

While installing a guardrail on a drilling rig platform, a 19-year-old leasehand fell 3.83 metres and sustained fatal head injuries. The worker had two weeks of experience.

A 49-year-old general labourer working at a newly constructed water treatment maturation plant apparently fell an undetermined distance from a fixed vertical ladder, landing on his head.

Return Undeliverable Canadian Addresses to:
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